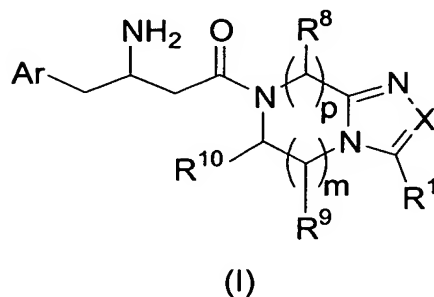


Amendment to the Claims:

Cancel Claims 22, 25, 26, 27, 29, and 30.

Listing of Claims:

1. (original) A compound of structural formula I:



wherein

each n is independently 0, 1, or 2;

m is 1 or 2;

p is 1 or 2; with the proviso that m + p is 3;

X is N or CR²;

Ar is phenyl substituted with one to five R³ substituents;

R¹ and R² are each independently selected from the group consisting of

hydrogen,

halogen,

hydroxy,

cyano,

C₁₋₁₀ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

C₁₋₁₀ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

C₁₋₁₀ alkylthio, wherein alkylthio is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

C₂₋₁₀ alkenyl, wherein alkenyl is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

$(\text{CH}_2)_n\text{COOH}$,

$(\text{CH}_2)_n\text{COOC}_{1-6}$ alkyl,

$(\text{CH}_2)_n\text{CONR}^4\text{R}^5$, wherein R^4 and R^5 are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, $(\text{CH}_2)_n$ -phenyl, $(\text{CH}_2)_n$ -C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; or R^4 and R^5 together with the nitrogen atom to which they are attached form a heterocyclic ring selected from azetidine, pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;

$(\text{CH}_2)_n\text{-NR}^4\text{R}^5$,

$(\text{CH}_2)_n\text{-OCONR}^4\text{R}^5$,

$(\text{CH}_2)_n\text{-SO}_2\text{NR}^4\text{R}^5$,

$(\text{CH}_2)_n\text{-SO}_2\text{R}^6$,

$(\text{CH}_2)_n\text{-NR}^7\text{SO}_2\text{R}^6$,

$(\text{CH}_2)_n\text{-NR}^7\text{CONR}^4\text{R}^5$,

$(\text{CH}_2)_n\text{-NR}^7\text{COR}^7$,

$(\text{CH}_2)_n\text{-NR}^7\text{CO}_2\text{R}^6$,

$(\text{CH}_2)_n\text{-COR}^6$,

$(\text{CH}_2)_n\text{-C}_{3-6}$ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

$(\text{CH}_2)_n$ -aryl, wherein aryl is unsubstituted or substituted with one to five substituents independently selected from halogen, cyano, hydroxy, $\text{NR}^7\text{SO}_2\text{R}^6$, SO_2R^6 , CO_2H , C₁₋₆ alkyloxycarbonyl, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

$(\text{CH}_2)_n$ -heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and

$(\text{CH}_2)_n$ -heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three substituents independently selected from oxo, hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆

alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
wherein any methylene (CH₂) carbon atom in R¹ or R² is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens;

each R³ is independently selected from the group consisting of

hydrogen,
halogen,
cyano,
hydroxy,
C₁₋₆ alkyl, unsubstituted or substituted with one to five halogens, and
C₁₋₆ alkoxy, unsubstituted or substituted with one to five halogens;

R⁶ is independently selected from the group consisting of tetrazolyl, thiazolyl, (CH₂)_n-phenyl, (CH₂)_n-C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and wherein any methylene (CH₂) carbon atom in R⁶ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, C₁₋₄ alkyl, and C₁₋₄ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;

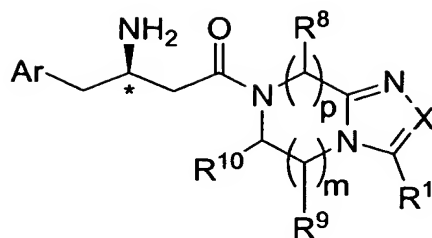
each R⁷ is hydrogen or R⁶;

each R⁸, R⁹, and R¹⁰ is independently selected from the group consisting of

hydrogen,
cyano,
carboxy,
C₁₋₆ alkyloxy carbonyl,
C₁₋₁₀ alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkoxy, carboxy, C₁₋₆ alkyloxy carbonyl, and phenyl-C₁₋₃ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,

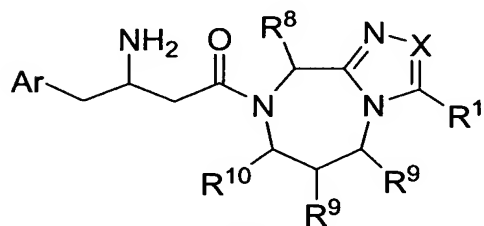
(CH₂)_n-aryl, wherein aryl is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three substituents independently selected from oxo, hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and
(CH₂)_nCONR⁴R⁵, wherein R⁴ and R⁵ are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, (CH₂)_n-phenyl, (CH₂)_n-C₃₋₆ cycloalkyl, and C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or R⁴ and R⁵ together with the nitrogen atom to which they are attached form a heterocyclic ring selected from azetidine, pyrrolidine, piperidine, piperazine, and morpholine wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
wherein any methylene (CH₂) carbon atom in R⁸, R⁹ or R¹⁰ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens.

2. (original) The compound of Claim 1 of structural formula Ia wherein the carbon atom marked with an * has the *R* configuration:



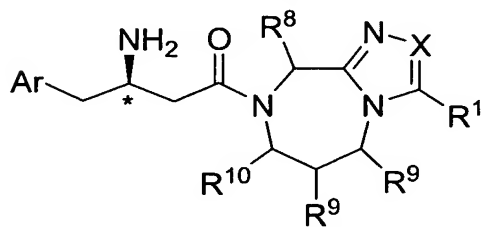
(Ia)

3. (original) The compound of Claim 1 of structural formula Ib:



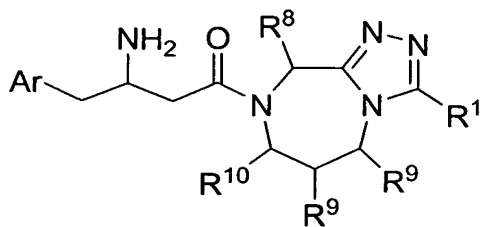
(Ib)

4. (original) The compound of Claim 3 of structural formula Ic wherein the carbon atom marked with an * has the *R* configuration



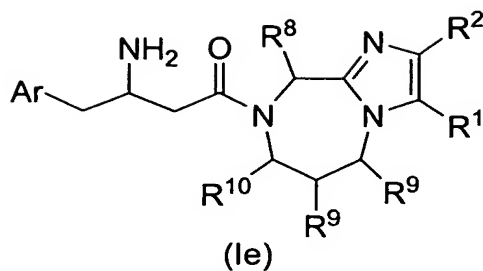
(Ic)

5. (original) The compound of Claim 3 of structural formula Id:

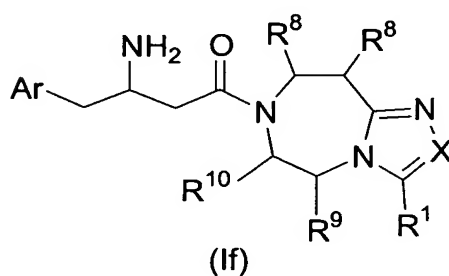


(Id)

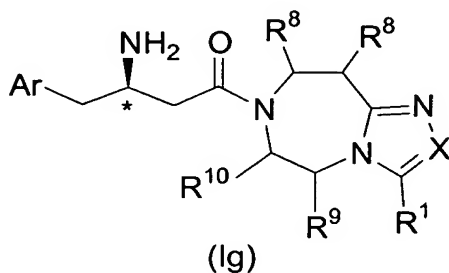
6. (original) The compound of Claim 3 of structural formula Ie:



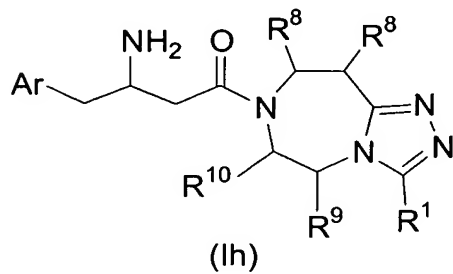
7. (original) The compound of Claim 1 of structural formula If:



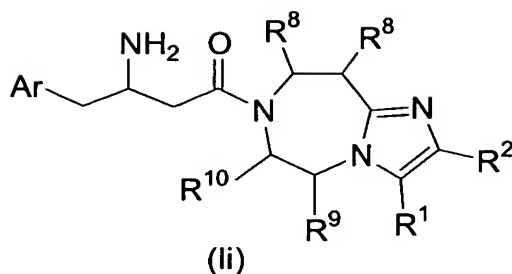
8. (original) The compound of Claim 7 of structural formula Ig wherein the carbon atom marked with an * has the *R* configuration:



9. (original) The compound of Claim 7 of structural formula Ih:



10. (original) The compound of Claim 7 of structural formula Ii:



11. (original) The compound of Claim 1 wherein R^3 is selected from the group consisting of hydrogen, fluoro, chloro, bromo, trifluoromethyl, and methyl.

12. (original) The compound of Claim 11 wherein R^3 is selected from the group consisting of hydrogen, fluoro, and chloro

13. (original) The compound of Claim 1 wherein R^1 is selected from the group consisting of:

hydrogen,

halogen,

C_{1-6} alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents

independently selected from halogen or hydroxy,

$(CH_2)_n$ -aryl, wherein aryl is unsubstituted or substituted with one to five substituents

independently selected from halogen, CN, hydroxy, $NR^7SO_2R^6$, SO_2R^6 , CO_2H , C_{1-6} alkyloxycarbonyl, C_{1-6} alkyl, and

C_{1-6} alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;

$(CH_2)_n$ -heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C_{1-6} alkyl, and C_{1-6} alkoxy,

wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and

wherein any methylene (CH_2) carbon atom in R^1 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl unsubstituted or substituted with one to five halogens.

14. (original) The compound of Claim 13 wherein R^1 is selected from the group consisting of

hydrogen,

methyl,

trifluoromethyl,
phenyl,
4-fluorophenyl,
4-(trifluoromethyl)phenyl,
4-(trifluoromethoxy)phenyl, and
5-methyl-1,3,4-oxadiazol-2-yl.

15. (original) The compound of Claim 1 wherein R^2 is selected from the group consisting of

hydrogen,
halogen, and
 C_{1-6} alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents independently selected from halogen or hydroxy.

16. (original) The compound of Claim 15 wherein R^2 is selected from the group consisting of hydrogen and trifluoromethyl.

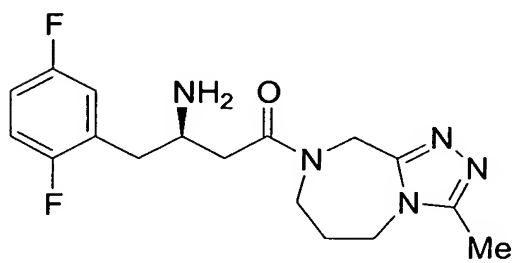
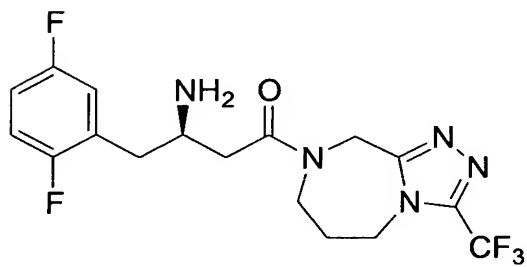
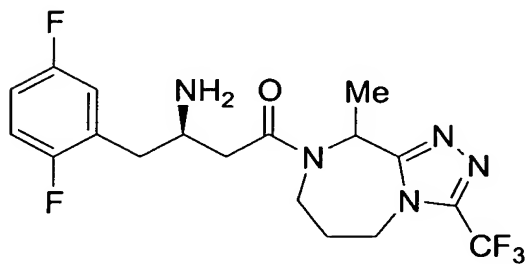
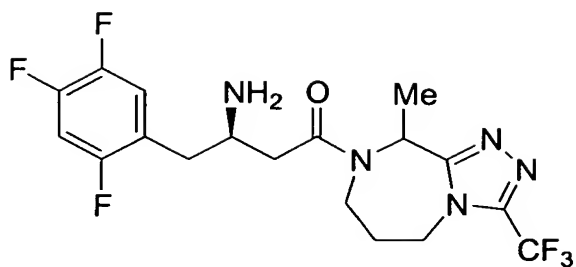
17. (original) The compound of Claim 1 wherein R^8 , R^9 , and R^{10} are independently selected from the group consisting of:

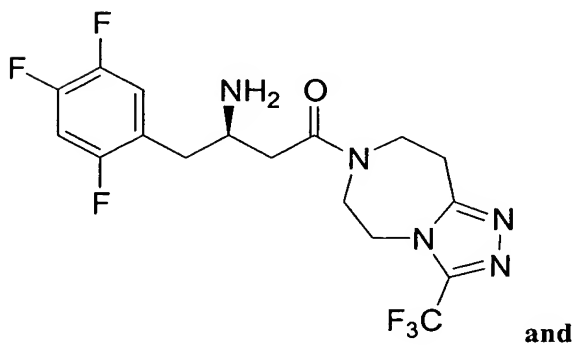
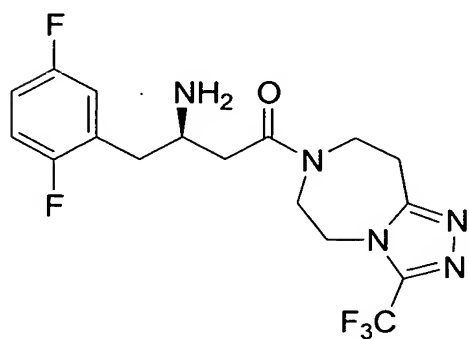
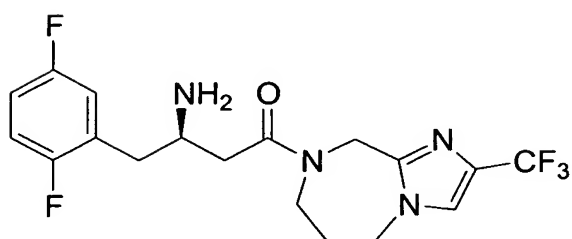
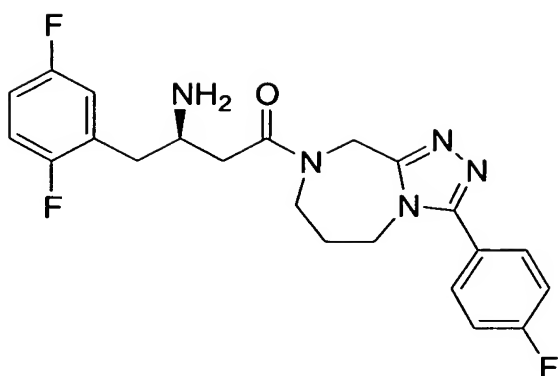
hydrogen and
 C_{1-6} alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C_{1-6} alkoxy, and phenyl- C_{1-3} alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens.

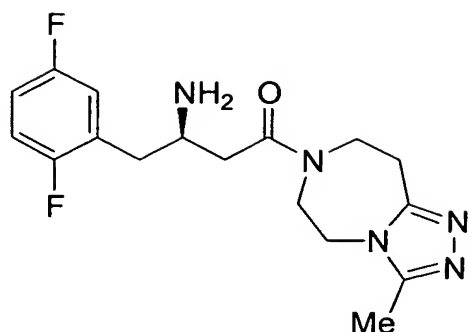
18. (original) The compound of Claim 17 wherein R^8 , R^9 , and R^{10} are each independently selected from the group consisting of hydrogen and methyl.

19. (original) The compound of Claim 18 wherein R^9 and R^{10} are hydrogen.

20. (original) The compound of Claim 2 which is selected from the group consisting of:







or a pharmaceutically acceptable salt thereof.

21. (original) A pharmaceutical composition which comprises a compound of Claim 1 and a pharmaceutically acceptable carrier.

22. (cancelled)

23. (original) A method for treating non-insulin dependent (Type 2) diabetes in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

24. (original) A method for treating hyperglycemia in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

25-27. (cancelled)

28. (original) The pharmaceutical composition of Claim 21 further comprising one or more additional active ingredients selected from the group consisting of:

- (a) a second dipeptidyl peptidase IV inhibitor;
- (b) an insulin sensitizer selected from the group consisting of a PPAR γ agonist, a PPAR α/γ dual agonist, a PPAR α agonist, a biguanide, and a protein tyrosine phosphatase-1B inhibitor;
- (c) an insulin or insulin mimetic;
- (d) a sulfonylurea or other insulin secretagogue;
- (e) an α -glucosidase inhibitor;
- (f) a glucagon receptor antagonist;

- (g) GLP-1, a GLP-1 mimetic, or a GLP-1 receptor agonist;
- (h) GIP, a GIP mimetic, or a GIP receptor agonist;
- (i) PACAP, a PACAP mimetic, or a PACAP receptor agonist;
- (j) a cholesterol lowering agent such as (i) HMG-CoA reductase inhibitor, (ii) sequestrant, (iii) nicotiny alcohol, nicotinic acid or a salt thereof, (iv) PPAR α agonist, (v) PPAR α / γ dual agonist, (vi) inhibitor of cholesterol absorption, (vii) acyl CoA:cholesterol acyltransferase inhibitor, and (viii) anti-oxidant;
- (k) a PPAR δ agonist;
- (l) an antiobesity compound;
- (m) an ileal bile acid transporter inhibitor;
- (n) an anti-inflammatory agent; and
- (o) an antihypertensive agent.

29-30 (cancelled)